

NASA - LaRC
SAFETY NEWSLETTER
A PUBLICATION OF THE OFFICE OF SAFETY AND FACILITY ASSURANCE,
OSEMA

JULY 1997

ERGONOMICS

Introduction:

What is ergonomics? This is a new word for some of us but it can be a very important word to understand in our jobs. Ergonomics is the science of adapting equipment, procedures and surroundings to people. In general you can say that good ergonomics makes your job fit you. By designing the workplace so they fit the worker you can reduce the stress of repetitive motions when you perform your job.

Analyzing Ergonomics:

When you properly apply ergonomics it can help prevent injuries, improves efficiency, and also helps you on your off duty time. The first thing you need to do is analyze the physical and mental abilities of your people. Then evaluate the tasks as to what the physical and mental demands of the job and activities. After you have this information you need to look at the environment, this involves everything from the lighting to the tools being used.

Repetitive Motion Disorders:

Most of the problems we hear about with ergonomics fall into two categories. The first involves the hands from workers that use video display terminals (VDT's). The second concern is the backs from workers who sit at VDT's or any sitting job for long periods of time. The following are some ways to correct these problems and to make your work more comfortable and more efficient.

Work Surface:

- * Allow leg room underneath your desk.
- * Use a document holder to keep the document you are working on at the same height and distance as the screen.

Screen height, angle, and contrast:

- * Sit about an arm's length away and tilt the screen back slightly.
- * The top line of the screen, just below eye level when sitting upright.

- * Reduce screen glare by changing lighting or screen position.

Chair height:

- * Your feet should be flat on the floor.
- * Knees level with the hips.
- * Lower back should be supported.
- * Avoid positions in which your body is twisted.

Keyboard position:

- * Your arms should rest at the sides, with the elbows at right angle and wrists straight.
- * Padded wrist rests are also available to support wrists and soften hard corners.

Extras:

Cushion or a pillow to support the lower back.

Footrest can be used to bring your knees up to hip level.

Screen filter to help reduce glare.

Use proper lifting techniques.

Avoid twisting while lifting.

Lift with your legs.

Keep your back straight.

Keep what you are lifting close to your body.

If heavy get help.

Adjust your position frequently to avoid repeated stress on a single part of the body.

Adjust your pace when possible, increase your pace gradually at a new job.

Avoid awkward angles and bent wrist by using specially designed jigs, clamps, work surfaces and fixtures.

Use cushioned grips and ergonomically designed tools.

Always use the right tool for the job.

Exercise:

There are several exercises for the hands and back that you can do to help strengthen your muscles and help relieve strain. Hand exercises can be done at your desk throughout the day which will give you a break from the repetitive motion used in your job. Back exercises can strengthen your back and help protect from accidental injury. In addition to exercise just simple stretching will help reduce your risk of strain or sprain.

BICYCLE SAFETY

Now that the weather has warmed up along with the onset of students on the center, there are more bicycles on the streets. Bicycles will be operated on the right side of the roadway and operators will comply with the rules of the

road. (Bicycles are not to be ridden on the sidewalks).

SAFETY CLASSES OFFERED

Just a reminder that the following safety training classes are available to be presented for you at your safety meetings.

Confined Spaces (permit required)
Confined Space Awareness
Personal Protective Equipment (PPE)
Ergonomics (Office or Industrial)
Material Safety Data Sheets (MSDS)
Heat Stress
Cryogenics
Chemical Safety (Chemical Refresher)
General Office Safety

If you would like to setup a class, contact your supervisor and he can schedule by contacting Butch Jones at 4-8743.